AMENDMENT AND RESPONSE UNDER 37 CFR § 1.111

Serial Number: 09/961024

Filing Date: September 21, 2001

Title: MULTIPLE CHANNEL INTERFACE FOR COMMUNICATIONS BETWEEN DEVICES (As Amended)

Assignee: Intel Corporation

REMARKS

This responds to the Office Action mailed on April 8, 2004.

Claims 1, 19, 28, 36 and 43 are amended, no claims are canceled, and claims 44–48 are added; as a result, upon entry of this amendment, claims 1–48 will be pending in this application.

Information Disclosure Statement

Applicant submitted an Information Disclosure Statement and a 1449 Form on March 31, 2003. Applicant notes that an initialed copy of the 1449 Form was returned with the Office Action dated April 8, 2004, but that the final publication document (Avery, James, "Infiniband to PCI Bridge TCA", 1-39) was not initialed. Applicant respectfully requests that a copy of the 1449 Form where this reference has been initialed be returned to Applicant's Representatives to indicate that the cited document has been considered by the Examiner.

§112 Rejection of the Claims

Claims 1-27 and 36-43 were rejected under 35 USC § 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which Applicant regards as the invention. Applicant respectfully traverses the rejection for the reasons stated below.

Applicant has amended claims 1, 19, 36 and 43 to provide the needed antecedent bases and to clarify the portions of claim 19 deemed "unclear" by the Examiner. Reconsideration and Allowance of the rejected claims, as amended, are respectfully requested.

§102 Rejection of the Claims

Claims 1-2 were rejected under 35 USC § 102(b) as being anticipated by Holm et al. (U.S. 6,122,680). Applicant respectfully traverses the rejection for the reasons stated below.

Holm et al relates to a multiple channel data communications buffer with separate, singleport transmit and receive memories having a unique channel for each communication port¹.

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¹ Holm 6,122,680 – See title

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Holm shows an integrated circuit having interface units 30, 31, 32 and 33² with multi channel output (with input/output ports 20, 21, 22 and 23).

Holm does not show "a plurality of outbound links" or "a plurality of inbound links" as amended claim 1 provides. Accordingly, since all of the elements of claim 1 are not shown in Holm, the rejection does not make a *prima facie* showing of obviousness. Since independent claim 1 is not anticipated, claim 2 which is dependent upon it is not anticipated either.

Reconsideration and allowance of claims 1 and 2 is respectfully requested.

Claims 1-13, 17, 18, and 36-43 were rejected under 35 USC § 102(e) as being anticipated by Baker (U.S. 6,333,938). Applicant respectfully traverses the rejection for the reasons stated below.

Applicants do not admit that Baker, which issued after the filing date of the present application, is prior art and reserve the right to swear behind it at a later date. Applicants respectfully submit that the claims are distinguishable over Baker for the reasons stated below.

Baker appears to relate to a PCI interface autonomously outputting video data from data packets which include a header portion and a data portion. As such, Baker does not disclose a us interface coupleable to an internal bus as amended claim 1 provides. Baker relates to a bus interface coupled to DMA logic and a Transmit control block but does not show, for example, "a plurality of outbound links coupled to the plurality of outputs of the transmit control block" as amended claim 1 requires. Claims 2–13, 17 and 18 are each dependent upon claim 1 and therefore distinguishable over Baker for the reasons stated above relating to claim 1 and for additional reasons.

Amended claim 36 is a method claim which includes "forming a plurality of outbound links coupled to a plurality of outputs of the transmit control block," a feature which is lacking in claim 36 for the reasons stated immediately above. Dependent claims 37–43 are patentable over Baker for the same reasons as claim 36 and additional reasons. Reconsideration and allowance of claims 36–43, as amended, is respectfully requested

² Holm, see embodiment of Fig. 1.

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§103 Rejection of the Claims

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Claims 14, 15, and 28-34 were rejected under 35 USC § 103(a) as being unpatentable over Baker in view of Earnest (U.S. 6,226,338). Applicant respectfully traverses the rejection for the reasons stated below.

Applicants do not admit that Earnest is prior art and reserve the right to swear behind it at a later date. Applicants respectfully submit that the claims are distinguishable over Earnest and the Office Action's proposed combination of Baker with Earnest for the reasons stated below.

The Office Action does not meet the predicate requirement that an obviousness rejection must show a suggestion or a motivation, either in the references themselves or in the knowledge of one of ordinary skill in the art, to modify the reference or to combine reference teachings³. Neither evidence nor reasoning were included in the rejection to meet the requirement. An Office Action failing to show evidence of a motivation to combine references does not make a prima facie showing of obviousness.

Each of the rejected independent claims 14, 15 is patentable over Baker for the reasons stated in the discussion of the §102 rejection based upon Baker. The cited Earnest patent does not show those elements of amended independent claim 1 missing from Baker, so the §103 rejection of claims dependent upon claim 1 fails to make a prima facie case of obviousness

In the rejection of claim 28, the Office Action states that Baker shows a method of transmitting data which includes "selecting one of the plurality of transmit FIFOs that contains data to be transmitted and that is not in a wait state4 (emphasis added)" Applicant does not find support for the "that is not in the wait state" in the cited portions of Baker.

The Office Action states that Earnest shows "transmitting the data to a corresponding one of the plurality of receive FIFOs that has not exceeded a threshold value.⁵" Since no predicate basis was stated in the rejection to justify combination of Baker and Earnest, no prima facie case has been made for the rejection. Dependent claims 29-34 are allowable for the same reasons as claim 28.

Reconsideration and allowance of claims 14, 15 and 28–34 is respectfully requested.

³ See MPEP §2143

Office Action page 9, numbered section 30, first paragraph.

⁵ Office Action page 9, numbered section 30, second paragraph

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Claim 35 was rejected under 35 USC § 103 (a) as being unpatentable over Baker in view of Earnest, and in further view of Holm et al . Applicant respectfully traverses the rejection for the reasons stated below.

Claim 35 is dependent upon claim 28 and is patentable for the same reasons as claim 28 among others. Reconsideration and allowance of claim 35 is respectfully requested.

Conclusion

Applicant respectfully submits that the claims are in condition for allowance and notification to that effect is earnestly requested. The Examiner is invited to telephone Applicant's attorney ((612) 373-6970) to facilitate prosecution of this application.

If necessary, please charge any additional fees or credit overpayment to Deposit Account No. 19-0743.

Respectfully submitted,

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By their Representatives.

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Date (1) 2004

Reg. No. 25,179

CERTIFICATE UNDER 37 CFR 1.8: The undersigned hereby certifies that this correspondence is being deposited with the United States Postal Service with sufficient postage as first class mail, in an envelope addressed to: MS Amendment, Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450, on this 9th day of Augiust, 2004.

Anne M. Richards

Name

Signature